

DIRECT TESTIMONY AND EXHIBITS OF

DANIEL F. SULLIVAN

ON BEHALF OF

THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF

DOCKET NO. 2019-4-G

**IN RE: ANNUAL REVIEW OF PURCHASED GAS ADJUSTMENT AND GAS
PURCHASING POLICIES OF PIEDMONT NATURAL GAS COMPANY,
INC.**

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION.

A. My name is Daniel F. Sullivan. My business address is 1401 Main Street, Suite 900, Columbia, South Carolina, 29201. I am employed by the South Carolina Office of Regulatory Staff (“ORS”) as the Deputy Director of the Audit Department.

Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A. I received a Bachelor of Science Degree in Business Administration with a major in Accounting from the University of South Carolina in December 1998. In February 2005, I began my employment with ORS and since have participated in cases dealing with the regulation of telecommunications, natural gas, electric, radioactive waste disposal, water and wastewater utilities.

Q. HAVE YOU TESTIFIED PREVIOUSLY BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA (“COMMISSION”)?

A. Yes.

Q. WHAT IS THE MISSION OF THE OFFICE OF REGULATORY STAFF?

1 **A.** ORS represents the public interest as defined by the South Carolina General
2 Assembly as:

3 The concerns of the using and consuming public with respect to
4 public utility services, regardless of the class of customer, and
5 preservation of continued investment in and maintenance of utility
6 facilities so as to provide reliable and high-quality utility services.

7 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

8 **A.** The purpose of my testimony is to set forth findings resulting from ORS's
9 examination of Piedmont Natural Gas Company, Inc.'s ("Company" or "Piedmont")
10 purchased gas deferred account, storage inventory activity, and hedging account activity,
11 for the period April 2018 through March 2019 ("review period").

12 **Q. IN CONNECTION WITH YOUR TESTIMONY, DID YOU PREPARE OR CAUSE**
13 **TO BE PREPARED ANY EXHIBITS?**

14 **A.** Yes, the Audit Department prepared Audit Exhibit DFS-1, titled "Purchased Gas
15 Deferred Account Analysis Summary," Audit Exhibit DFS-2, titled "Storage Inventory
16 Activity," and Audit Exhibit DFS-3, titled "Hedging Account Activity," in connection with
17 this testimony. These exhibits were prepared by me or under my direction and supervision.

18 **Q. UNDER WHAT AUTHORITY DOES ORS MONITOR THE ACTIVITY IN**
19 **PIEDMONT'S PURCHASED GAS DEFERRED ACCOUNT?**

20 **A.** In Order No. 88-294, the Commission found that:

- 21 (1) A true-up for differences between billed and filed rates is appropriate and necessary
22 to ensure that Piedmont's customers pay no more than Piedmont's actual cost of
23 gas.

(2) A true-up of demand charges for changes in sales volumes is appropriate and necessary to ensure that Piedmont's customers pay no more than Piedmont's actual cost of gas.

(3) The Company is to maintain an account reflecting its gas costs each month, the amount of gas costs recovered each month, and amounts deferred from month to month. The Company is also required to file, with the Commission, a report on a monthly basis showing the status of this purchased gas deferred account.

Additionally, with the issuance of Commission Order No. 2002-223 dated March 26, 2002, the Company is required to file regular reports on the status of the hedging program and the results of its hedging activities.

Q. HAS ORS EXAMINED THE COMPANY'S PURCHASED GAS DEFERRED ACCOUNT?

A. Yes. ORS has examined the activities included in the purchased gas deferred account. In addition, ORS has examined the Company's gas storage inventory activity and hedging account activity, for the review period.

Q. WHAT IS INCLUDED IN AUDIT EXHIBIT DFS-1, PURCHASED GAS DEFERRED ACCOUNT ANALYSIS SUMMARY?

A. Audit Exhibit DFS-1 presents, for each month of the review period under examination, the components which comprise the Company's (over)/under collection in the purchased gas deferred account. These components are:

Commodity True-Up – These amounts represent the difference in the Company's actual gas costs on a monthly basis as compared to the benchmark cost of gas included in the Company's Gas Cost Recovery Mechanism ("GCRM") filings during the review period.

1 The Company's benchmark cost of gas at the beginning of the review period was \$2.75 per
2 dekatherm, established as a result of the Company filing GCRM #145, effective the first
3 billing cycle in February 2018. The Company's benchmark cost of gas at the end of the
4 review period was also \$2.75 per dekatherm, established as a result of the Company filing
5 GCRM #149, effective the first billing cycle in March 2019. In accordance with
6 Commission Order No. 2010-250 dated March 30, 2010, the Company includes unbilled
7 volumes in its commodity true-up calculations in order to achieve a better matching of gas
8 cost collections versus actual gas costs in the months they occur. South Carolina's portion
9 of commodity true-up for the review period decreased the over-collection by \$244,854.

10 **Demand True-Up** – These amounts represent the (over)/under collection of demand
11 charges incurred by the Company as compared to demand charges billed and collected
12 from customers. In accordance with Commission Order No. 2010-250, the Company
13 includes unbilled volumes in its demand true-up calculations in order to achieve a better
14 matching of gas cost collections versus actual gas costs in the months they occur. The
15 design day factor for allocation of demand charges to South Carolina is 14.92%, effective
16 January 1, 2014, due to North Carolina Utilities Commission ("NCUC") Docket No. G-9
17 Sub 631, Order dated December 17, 2013. The methodology used to calculate the design
18 day factor for demand allocation of 14.92% is in compliance with Commission Order No.
19 2004-501, dated October 15, 2004. Demand true-up for the review period decreased the
20 over-collection by \$819,463.

21 **Negotiated Losses** – In competition with alternate fuels, the Company's GCRM allows it
22 to maintain its industrial load by selling gas at less than the approved tariff, resulting in

margin losses. During the review period there were no negotiated losses, so there was no effect on the Company's (over)/under-collection.

Secondary Market Sharing – Effective with rates approved in Commission Order No. 2002-761 dated November 1, 2002, the Company credited 75% of the margin from off-system sales and capacity release transactions to the purchased gas deferred account. The remaining 25% was retained by the Company. Additionally, the Order provided that capacity release credits and off-system sales would be allocated to South Carolina using the same design day methodology approved for fixed demand costs.

In accordance with NCUC's Order in Docket No. G-9 Sub 682, dated September 29, 2016, Approving Merger Subject to Regulatory Conditions and Code of Conduct regarding the merger of Piedmont and Duke Energy, 100% of margins received by Piedmont from secondary market sales to Duke Energy Carolinas, LLC and Duke Energy Progress, LLC are now credited to the purchased gas deferred gas accounts for the benefit of the ratepayers.

Shared margins and capacity release credits for the review period increased the over-collection by \$4,047,972. It should be noted that in compliance with Commission Order No. 95-1461 dated August 22, 1995, the Company is properly reporting capacity release activity. These capacity release credits totaling \$2,666,537 are included in the total of \$4,047,972 listed above for secondary market sharing.

Weather Normalization – In compliance with Commission Order No. 95-1649 dated November 7, 1995, the Company began recording in the purchased gas deferred account weather normalization effective for the winter heating season of November through March. The weather normalization adjustment is designed to increase or decrease the margin

1 component of the rate based on a comparison of actual weather conditions during the
2 period, to normal weather conditions. Weather normalization adjustments for the review
3 period increased the over-collection by \$2,015 as a result of colder than normal weather
4 for the 2018-2019 heating season.

5 **Uncollectibles** – In Order No. 2006-527 dated October 11, 2006, the Commission
6 approved the Company's request to remove uncollectible gas cost expense from its cost of
7 service and authorized the recovery of these costs through the Company's purchased gas
8 deferred account. Under this revised methodology, the commodity cost of gas portion of
9 uncollectible accounts is now a component of the purchased gas deferred account. The
10 balance of the uncollectible accounts expensed, including the Company's margin, will be
11 recovered through its annual Rate Stabilization Act filing. The uncollectible gas cost
12 adjustment decreased the over-collection during the review period by \$361,052.

13 **Supplier Refunds** – The Company received supplier refunds totaling \$733,027 during the
14 review period. South Carolina's allocation of these refunds increased the over-collection
15 by \$107,207.

16 **Hedging Activity Transfer** – In Order No. 2006-527, the Commission authorized the
17 Company to transfer the balance of its cumulative hedging gains or losses to the purchased
18 gas deferred account on a monthly basis, effective November 1, 2006. Transfer of the
19 monthly hedging gains and losses to the purchased gas deferred account for the review
20 period decreased the over-collection by \$134,016.

21 **Other Adjustments** – In December 2018, the Company made an adjusting entry to record
22 \$1,368 of additional interest associated with the period January 2018 – December 2018,

for January 2018 and February 2018 supplier invoice adjustments. This adjustment decreased the over-collection by \$1,368.

Interest – In Order No. 2009-579, the Commission ordered that, effective September 1, 2009, the interest rate to calculate (over)/under collection balances to be the rate of interest as of the first day of each month for 10-year United States Government Treasury Bills, plus an all-in spread of 65 basis points (.65 percentage points). It also ordered that interest not be accrued on (over)/under collection balances which exceed \$20 million in the purchased gas deferred account. Total accrued interest for the review period decreased the over-collection by \$8,785.

Q. WHAT IS INCLUDED IN AUDIT EXHIBIT DFS-2, STORAGE INVENTORY ACTIVITY?

A. During our examination, the Company provided ORS with detailed inventory calculations of its underground and liquefied natural gas (“LNG”) storage facilities. ORS accumulated the various inventory levels by storage location in total, and included a summary of them in Audit Exhibit DFS-2, for Commission consideration.

The Company has contracted with six (6) underground storage facilities. Four (4) of these facilities are on the Transco System. They include General Storage Service and General Storage Service–Dominion located in Pennsylvania, Washington Storage Service located in Louisiana, and Eminence Storage Service located in Mississippi. The fifth and sixth underground storage facilities are on the Columbia Gas Transmission System. The fifth is Firm Storage Services, which is owned by Columbia Gas Transmission Corporation and operated by Columbia Gas Storage, with facilities in Pennsylvania, Virginia, and West Virginia. The sixth is Hardy Storage Company, located in West Virginia, which is jointly

owned by Columbia Gas Transmission Corporation and Piedmont. Audit Exhibit DFS-2, “Total Underground” section, details the inventory activities of these underground facilities in total. The inventory located in the six (6) underground facilities at the beginning of the review period totaled 5,305,810 dekatherms at a total cost of \$16,280,204 for a weighted average cost of \$3.0684 per dekatherm. The net inventory decreased during the review period resulting in an ending inventory balance in the underground facilities of 5,190,365 dekatherms at a total cost of \$16,198,994 for a weighted average cost per dekatherm of \$3.1210. During its examination, ORS obtained verification from the storage facility operators of the volumes stored in each of these facilities at the close of the review period.

Audit Exhibit DFS-2 also contains a section titled “Total LNG” which is a summary of the various LNG inventories maintained by the Company, including Pine Needle. Pine Needle is a LNG facility located in Guilford County, North Carolina and is jointly owned by Piedmont, Transco and several other utilities and/or investors. Inventory is also stored at the Company’s LNG facilities located at LNG-Huntersville near Charlotte, North Carolina and at LNG-Bentonville in Four Oaks, North Carolina. Piedmont also has inventory at the Transco LNG facility located in Carlstadt, New Jersey. Piedmont’s records indicated LNG inventory located at these facilities at the beginning of the review period totaled 2,366,025 dekatherms at a total cost of \$8,061,817 for a weighted average cost of \$3.4073 per dekatherm. The net inventory decreased during the review period resulting in an ending LNG inventory balance for these four facilities of 1,491,126 dekatherms at a total cost of \$5,111,437 for a weighted average cost per dekatherm of \$3.4279. During its

examination, ORS verified the calculation of ending inventory balances and the injections and withdrawals to the daily storage activity worksheets for each facility.

Q. WHAT IS INCLUDED ON AUDIT EXHIBIT DFS-3, HEDGING ACCOUNT ACTIVITY?

A. Audit Exhibit DFS-3 details the results of the Company's hedging program for the review period. Commission Order No. 2002-223 approved the Company's experimental natural gas hedging program.

In Order No. 2006-527, effective November 1, 2006, the Commission authorized the Company to transfer the balance of its cumulative hedging gains or losses to the purchased gas deferred account on a monthly basis. Monthly net hedging gains or losses before interest were transferred to the purchased gas deferred account and included as part of the interest calculation. Total hedging activity for the review period resulted in a decrease in the over-collection in the purchased gas deferred account of \$134,016.

As indicated on Audit Exhibit DFS-3, the cumulative loss at the end of the review period for the hedging program is \$41,442,913.

Q. WHAT ARE ORS'S FINDINGS REGARDING PIEDMONT'S PURCHASED GAS DEFERRED ACCOUNT?

A. Based on our examination, it is the opinion of ORS that the over collection balance in the purchased gas deferred account at March 31, 2019 of (\$2,885,925), shown on Company witness Tomlinson's Exhibit_(MBT-1), is accurately stated.

Q. WILL YOU UPDATE YOUR TESTIMONY BASED ON INFORMATION THAT BECOMES AVAILABLE?

1 **A.** Yes. ORS fully reserves the right to revise its recommendations via supplemental
2 testimony should new information not previously provided by the Company, or other
3 sources, becomes available.

4 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

5 **A.** Yes, it does.
6

PIEDMONT NATURAL GAS COMPANY, INC.
DOCKET NO. 2019-4-G
PURCHASED GAS DEFERRED ACCOUNT ANALYSIS SUMMARY
FOR TWELVE MONTHS ENDED MARCH 31, 2019

Month	2018						2019						Total
	April \$	May \$	June \$	July \$	August \$	September \$	October \$	November \$	December \$	January \$	February \$	March \$	
Beginning Balance	(298,268)	(547,567)	(149,559)	(174,893)	791,285	1,443,375	2,317,594	3,052,886	2,522,484	1,349,889	(3,460,649)	(3,522,113)	
Commodity True-Up	(424,249)	(415,011)	(683,497)	(117,356)	(303,908)	(108,340)	216,299	1,121,262	2,214,589	(2,661,011)	725,790	679,886	244,854
Demand True-Up	233,555	955,897	781,061	1,147,968	993,362	1,060,211	662,798	(526,533)	(1,704,645)	(1,850,325)	(937,367)	3,481	819,463
Negotiated Losses	0	0	0	0	0	0	0	0	0	0	0	0	0
Secondary Market Sharing	(155,949)	(218,689)	(213,995)	(223,644)	(218,571)	(211,862)	(154,930)	(354,295)	(394,003)	(1,167,647)	(339,151)	(395,236)	(4,047,972)
Weather Normalization	142	88	(1,820)	6	25	(5)	2	(409,997)	(1,194,023)	888,181	443,454	271,932	(2,015)
Uncollectibles	38,830	68,549	60,399	81,714	67,331	29,006	943	(15,755)	(3,716)	1,020	14,426	18,305	361,052
Supplier Refunds	0	(26,551)	(2,944)	0	0	(1,373)	(31)	0	(5,064)	(71,244)	0	0	(107,207)
Hedging Activity Transfer	59,634	34,733	35,934	76,563	110,594	100,785	1,710	(353,580)	(92,873)	53,370	41,149	65,997	134,016
Other Adjustments	0	0	0	0	0	0	0	0	1,368	0	0	0	1,368
Ending Balance Before Interest	(546,305)	(148,551)	(174,421)	790,358	1,440,118	2,311,797	3,044,385	2,513,988	1,344,517	(3,457,767)	(3,512,348)	(2,877,748)	
Interest	(1,262)	(1,008)	(472)	927	3,257	5,797	8,501	8,496	5,372	(2,882)	(9,765)	(8,176)	8,785
Ending Balance	(547,567)	(149,559)	(174,893)	791,285	1,443,375	2,317,594	3,052,886	2,522,484	1,349,889	(3,460,649)	(3,522,113)	(2,885,924)	
Interest Rate	3.586%	3.474%	3.497%	3.614%	3.503%	3.705%	3.805%	3.663%	3.334%	3.281%	3.361%	3.066%	

Purchased Gas Deferred Account (Over)/Under-Collection as of 3/31/19

(\$2,885,924) (1)

(1) - Variance from Exhibit (MBT-1) of \$.97 is due to rounding

PIEDMONT NATURAL GAS COMPANY, INC.
DOCKET NO. 2019-4-G
STORAGE INVENTORY ACTIVITY
FOR TWELVE MONTHS ENDED MARCH 31, 2019

	Total Underground Injections					Total Underground Withdrawals					Total Underground Balance				
	Gross DTs #	Used/Injected #	Price \$	Commodity	Injection/Charge \$	W/D Charge \$	DTs #	Price \$	Amount \$	DTs #	Amount \$	DTs #	Amount \$	Wtd. Cost \$	
Beg. Bal.															
Apr-18	797,224	(12,322)	2.6313	2,097,725	32,430	0	(401,694)	2.8727	(1,153,948)	5,305,810	16,280,204	5,689,018	17,256,411	3.0684	
May-18	1,284,834	(23,467)	2.5900	3,327,740	49,519	0	(185,758)	2.8533	(530,018)	6,764,627	20,103,652	9,155,974	26,804,033	3.0333	
Jun-18	2,509,609	(44,437)	2.7148	6,813,131	92,649	0	(73,825)	2.7822	(205,399)	12,510,529	36,421,191	14,410,598	41,730,580	2.9719	
Jul-18	3,739,275	(69,756)	2.7717	10,364,068	135,009	0	(314,964)	2.8001	(881,919)	15,864,407	50,461,890	17,357,461	50,754,080	2.9275	
Aug-18	2,085,825	(37,728)	2.7094	5,651,258	75,307	0	(148,028)	2.8182	(417,176)	15,455,384	46,189,188	10,552,462	31,931,681	2.9112	
Sep-18	1,700,003	(29,306)	2.7619	4,695,167	64,883	0	(216,888)	2.8243	(612,561)	7,952,906	24,303,726	5,190,365	16,198,994	2.8958	
Oct-18	1,953,561	(34,207)	2.9405	5,744,427	72,199	0	(426,300)	2.8919	(1,232,805)	16,198,994	16,198,994	22,618	83,916	2.8919	
Nov-18	923,884	(12,794)	3.5170	3,249,265	33,456	0	(1,039,497)	2.8769	(2,990,531)	15,864,407	45,878,069	17,357,461	50,461,890	2.9072	
Dec-18	450,230	(6,398)	4.1822	1,882,961	19,968	0	(2,217,502)	2.9167	(6,467,821)	15,864,407	45,878,069	17,357,461	50,461,890	2.9458	
Jan-19	273,084	(3,518)	3.2170	878,511	12,579	0	(5,172,488)	2.9287	(15,148,597)	15,864,407	45,878,069	17,357,461	50,461,890	2.9886	
Feb-19	280,762	(3,786)	2.7414	769,686	14,273	0	(2,876,532)	2.9243	(8,411,914)	15,864,407	45,878,069	17,357,461	50,461,890	3.0260	
Mar-19	36,541	(415)	2.8072	102,578	2,714	0	(2,798,667)	2.9335	(8,210,024)	15,864,407	45,878,069	17,357,461	50,461,890	3.0560	
	16,034,832	(278,134)	2.8423	45,576,517	604,986	0	(15,872,143)	2.9147	(46,262,713)	15,864,407	45,878,069	17,357,461	50,461,890	3.1210	

	Total LNG Injections					Total LNG Withdrawals					Adjustments To Tank Level					Total LNG Balance				
	Gross DTs #	Used/Injected #	Price \$	Commodity	Injection/Charge \$	W/D Chg/Exp Def \$	DTs #	Price \$	Amount \$	DTs #	Amount \$	DTs #	Amount \$	DTs #	Amount \$	DTs #	Amount \$	Wtd. Cost \$		
Beg. Bal.																				
Apr-18	120,573	(2,043)	2.5542	307,969	1,172	30,704	(24,802)	3.7666	(93,418)	0	0	2,366,025	8,061,817	2,366,025	8,061,817	2,366,025	8,061,817	3.4073		
May-18	54,392	(1,712)	2.4704	134,368	529	30,377	(26,903)	3.7902	(101,968)	0	0	2,459,753	8,308,244	2,459,753	8,308,244	2,459,753	8,308,244	3.3777		
Jun-18	517,285	(11,631)	2.6802	1,386,407	4,160	96,391	(45,811)	3.7140	(170,142)	0	0	2,485,530	8,371,550	2,485,530	8,371,550	2,485,530	8,371,550	3.3681		
Jul-18	626,625	(12,412)	2.6892	1,685,095	3,834	177,282	(68,168)	3.7095	(252,866)	0	0	2,945,373	9,688,366	2,945,373	9,688,366	2,945,373	9,688,366	3.2894		
Aug-18	577,065	(11,556)	2.6764	1,544,480	3,570	151,067	(52,445)	3.6516	(191,509)	0	0	3,491,418	11,301,711	3,491,418	11,301,711	3,491,418	11,301,711	3.2370		
Sep-18	210,533	(5,564)	2.7294	574,626	1,719	87,848	(30,422)	3.6870	(112,166)	0	0	4,004,482	12,809,319	4,004,482	12,809,319	4,004,482	12,809,319	3.1987		
Oct-18	43,340	(1,365)	2.9411	127,468	421	31,794	(29,702)	3.7203	(110,501)	0	0	4,179,029	13,361,346	4,179,029	13,361,346	4,179,029	13,361,346	3.1972		
Nov-18	160,102	(856)	3.6683	587,308	264	68,026	(80,088)	3.4530	(276,545)	0	0	4,191,302	13,410,528	4,191,302	13,410,528	4,191,302	13,410,528	3.1996		
Dec-18	47,784	0	4.2370	202,460	264	113,950	(175,918)	3.2182	(566,144)	22,618	83,916	4,270,460	13,789,581	4,270,460	13,789,581	4,270,460	13,789,581	3.2291		
Jan-19	27,196	(856)	3.2394	88,100	264	39,979	(1,118,867)	3.1828	(3,561,144)	0	0	4,164,944	13,623,763	4,164,944	13,623,763	4,164,944	13,623,763	3.2711		
Feb-19	0	0	0.0000	0	0	45,016	(946,012)	3.0269	(2,863,514)	0	0	2,126,405	7,372,464	2,126,405	7,372,464	2,126,405	7,372,464	3.3169		
Mar-19	2,384,895	(47,995)	2.7835	6,638,281	15,933	47,590	(635,279)	3.6340	(2,308,617)	22,618	83,916	1,491,126	5,111,437	1,491,126	5,111,437	1,491,126	5,111,437	3.4671		
						920,024	(3,234,417)	3.2799	(10,608,534)											

PIEDMONT NATURAL GAS COMPANY, INC.
DOCKET NO. 2019-4-G
HEDGING ACCOUNT ACTIVITY
(GAIN)/LOSS RECOGNIZED AND OTHER EXPENSES
FOR TWELVE MONTHS ENDED MARCH 31, 2019

Month	Net Options Premium	Purchased Options Fees	RMI Fee	Proceeds from Positions	Exercised Options Fees	Net (Gain) or Loss	Cumulative (Gain) or Loss
	\$	\$	\$	\$	\$	\$	\$
Beginning Balance							41,308,897
Apr-18	62,280	930	558	(4,320)	186	59,634	41,368,531
May-18	41,410	635	558	(8,010)	140	34,733	41,403,264
Jun-18	34,880	496	558	0	0	35,934	41,439,198
Jul-18	75,090	915	558	0	0	76,563	41,515,761
Aug-18	108,920	1,116	558	0	0	110,594	41,626,355
Sep-18	98,910	1,317	558	0	0	100,785	41,727,140
Oct-18	57,220	791	558	(57,200)	341	1,710	41,728,850
Nov-18	40,320	558	558	(395,760)	744	(353,580)	41,375,270
Dec-18	32,800	434	558	(127,270)	605	(92,873)	41,282,397
Jan-19	52,130	682	558	0	0	53,370	41,335,767
Feb-19	40,080	511	558	0	0	41,149	41,376,916
Mar-19	64,540	899	558	0	0	65,997	41,442,913
	708,580	9,284	6,696	(592,560)	2,016	134,016	